



## SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

FOUNDED IN 1966

A NON-PROFIT AMATEUR TECHNICAL ORGANIZATION DEDICATED  
TO THE ADVANCEMENT OF COMMUNICATIONS ABOVE 1000 MC.

### W6IFE Newsletter

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The **1 February 2001** meeting of the SBMS will have Kerry, N6IZW talk about the 1296 MHz transverter built from Qualcomm parts. Kerry will have some parts available at the meeting. The SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1900 hours local time on the first Thursday of each month. Check out the SBMS web site at <http://www.ham-radio.com/sbms/>.

Annual SBMS Dinner will be on 10 February at the Home Style Restaurant in Guasti, CA. President Doug says plan to arrive at 6:30 p.m., we will have dinner from the menu followed by white elephant exchange and stuff. From Ontario, CA on the 10 Freeway take the Haven Ave off ramp so as to be on the south side of the freeway. Go right on the first street (E Guasti Road). Drive through the Hotel area until you come to Turner. Turn left and go south until you find the first narrow road on the right. Follow it for about a block and you will run in to the Home Style Café 2909 Brookside Rd 909-390-0355. Meals are around \$10. White Elephant game plan- bring a microwave or RF or electronic something in a box or wrapped up. It needs a tag with what you know about it, like what frequency range it works on, maybe what it is, i.e. amplifier. It needs to be good junk. We will draw

numbers as to who gets first choice and so on. Once you get something, you can trade with someone else. Time to recycle the stuff in the shop.

**Prez Sez-**Hope everyone is thinking about the summer 10 GHz and up contest and their rigs. (I can hear the groans) About now is the time to get serious with your engineer to develop any changes you are going to make in your rig. Plan your building in two stages. Plan and finish the minimum necessary for success and then add on the upgrades in stages like a better pre amp, bigger tx amp, bigger dish, etc. Changes and modifications can mushroom on you and take far longer than you thought. Get started now so that if you are stymied, others can help you out. If you are thinking about wide or narrowband, go narrowband. If you are undecided about antennas, use AR2 horns. You can work most everyone on 10 GHz narrowband in the LA area with 200 mw and a pair of horns, so use that as a benchmark. If you do something like upgrade to a bigger dish, you will probably need to practice with it before you go out in the contest.

On to other things. The banquet. We will be at the Home Style Cafe. Directions etc are elsewhere in this issue. We should have a great time in a very comfortable place. We will have give aways, a white elephant exchange, and a few awards. I will be there and hope to have Helen with me.

The Update in Santa Clara. Here is what I know so far. Will said that the rooms that they have set aside are available and cheap Thursday through Sat. The problem is that most of us will want to go up on Wed. Their

non-package price at the same place is much higher. My suggestion, and he agrees, is that we should stay someplace about an hour South of St. Clara on Wed. night. That'll keep it cheap. Ken doesn't have to worry because we are looking for a local member to host his motor-home. I would like a list of names next meeting of those who want to basically caravan up to the meeting on Wed. stay somewhere along the way near the Bay Area, and stay in the lodging targeted by the Update. No money needed. I'll just make the reservation and set it up. Any ideas or feedback?

Japan- I have had a lot of communication from the Tokyo microwave group courtesy of JF1VAS and Hiro. It looks like a group will be at the Update with equipment and the desire to operate on this continent. I also received copies of their last three Updates in Tokyo. They are in Japanese, but not difficult to decipher due to the schematics. I think that it is important that they are looking to link with us. I think both we and they have a lot to offer each other and appreciate the help and friendship that our members have shown them. They have been working on some higher bands with great success. We hope to have some of the articles translated for the Update. Recently I came across a link to a company in France that is offering 10 GHz 4 watt amplifiers for sale complete. This is the URL of the French place <http://www.rfham.com/>. The page that lists the amp is: <http://www.rfham.com/prodcat.htm#product catalog. 73, Doug Millar K6JEY>

**Last meeting**--- Malcolm Levy, KO6SY presented a talk on the various digital modes of amateur communication including PSK31. Malcolm has been licensed since 1968 first with a VHF/UHF license only in the UK (G8CSU) then with full privileges as G4ACU, which he still holds today. He came to the US 16 years ago and once a citizen became licensed as KO6SY. He has been active on the digital HF modes since 1986 using RTTY, Amtor, Pactor and now PSK31, which beats them all! He is also a member of the Western States Weak Signal Society and professionally is involved in sales and marketing of high performance automatic test equipment. It was indicated that there has been an informal agreement that xx.290 MHz would be the location of the digital modes on microwave. i.e. 10,368.290 would be the slot to operate PSK31 while on 10 GHz. Welcome to returning member Mike Ramirez, W6YLZ and to visitor Lonnie Movius, NT6B of Lake Mathews and new member Christian Shoff, N9RIN of Newport Beach. The annual visit of Paul Lieb, KH6HME to the mainland happened again, welcome Paul. Sam, K6VLM had a power source for the "Qualcomm" noise sources and a copy is enclosed in this newsletter. Doug had some miscellaneous semiconductors and hardware to pass out to the membership present. April election time is coming up soon. By March there should be a nomination slate in place. 24 people were present.

**Activity** presented in the January 2001 SBMS meeting- Mel, WA6JBD found some 1 ft 24 GHz dishes and gunn sources and is cleaning them up to find out how many work; Kurt, K6RRA purchased a feed from a WW2 3 GHz radar, interesting looking piece; Paul, KH6HME reported this years contacts to the mainland haven't been as

good as years past; John KJ6HZ purchased a spectrum analyzer and a 3 GHz no-tune transverter and visited the SDMG meeting; Larry, K6HLH has a 10 GHz TWT working at 2w; Sam, K6VLM built a 2 GHz quazi-corner reflector antenna out of the ARRL Handbook; Jeff, KN6VR did some 1296 MHz antenna testing; Chip, N6CA indicated the PV beacon was having some cold temperature problems and will come down soon; Chuck, N6EQ had a 10 GHz contact with his new German rig; Ken, WB6DTA worked WA6CGR on his new 5 GHz rig; Mike, W6YLZ is getting back on 10 GHz; Dave, WA6CGR has a 2w 26 GHz power head for his power meter and indicated that the N6EX repeaters are now open for SBMS use; Dick, WB6DNX has been playing with 24 GHz parts and needs a 4 MHz TCXO for his syntheser; chuck, WA6EXV is rebuilding the SBMS Heaps Peak 2 GHz beacon, upping the power out to about 15 w, plans to change the antenna to a horizontal polarization, and add a repeater mode; bill, WA6QYR has been building filters of the latest Qualcomm 10 GHz transverter and one for the N6IZW 1296 MHz transverter; Doug, K6JEY has been testing some 2 ft dishes on 24 GHz.

### Scheduling

10 Feb Annual SBMS Dinner at Home Style Café in Guasti at 6:30 pm.

1 March Kerry, N6IZW will talk about Noise figure and construction of a source and have some equipment to compare your source against. Nominations for 2001-2002 Officers

5 April Program is TBD. Elections of Officers.

Microwave Update 2001 in San Jose September- President Doug is wanting to know who is interested in booking at a lower rate hotel say about 30 minutes away from the main event.

### Wants and Gots for sale

Want- 5 GHz mixer Ken, WB6DTA 818-848-9059

Want schematic for HP-8620 sweeper, Dick K6HIJ 760-253-2477

Want- HP-8412 display for 8410 network analyzer Larry K6HLH 661-264-3126

Want manual for HP 8551 Spectrum analyzer RF unit Kurt K6RRA 310-718-4910

Want any power head for General Microwave 460 power meter Doug, K6JEY 562-424-3737

Want 5 MHz TCXO for 10 GHz rig Mike W6YLZ 818-349-8525

For Sale- Metal drafting table 6 ft width includes 2-drawer storage unit- free- you pick up- must go quickly Carl AD6QL 714-996-8443

For Sale: An AIL 727 spectrum analyzer. .01-22 GHz, built in pre-selector, digital frequency display, 10 db ,2 db/div plus linear mode, oscillographic mode, IF output, calibrator, standard Tektronix display. Some minor problems but works fine and in excellent shape. All standard parts and very easy to work on.

With manual copy. \$400 Doug Millar, K6JEY 562-424-3737.

RF Design Magazine had a Frequency Allocation Wall Chart insert in the Jan 2001 issue . Some things of interest&emdash; Amateur Radio was listed as a user along with everyone else.

Ham band 1240-1300 MHz --had these as other users near by- radar 1215-2290, GPS 1215-1240.

Ham Radio 2300-2305 and 2390-2450 MHz-- had aero in between segments and fixed service beyond the upper end. Unlicensed 2390-2400. radar 2360-2390 ISM 2450-2500. Ovens 2400-2483.5. Reserved bands were 2300-2305, 2400-2402, 2417-2450. RFID 2400-2500. Satellite services 2320-2345. Wireless Com 2305-2320 and 2345-2360.

Ham Radio 3300-3500 MHz-- only had radar at 3.1-3.7 GHz listed as user.

Ham Band 5650-5925 MHz-- Short range com 5.85-5.925. Fixed service 5925-up. ISM 5725-5875. Radar 5.6-5.925. GEO Stationary 5.85-6.4. Unlicensed National Information Infrastructure 5.65-5.85

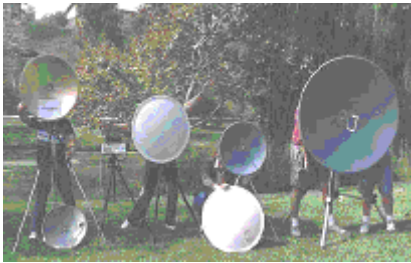
Ham band 10.0-10.5 GHz-- only had radar 10.0-10.45 and 10.5-10.55 GHz

Ham Band 24-24.25 GHz --had fixed services 21.2-23.6, 24.25-24.45. ISM 24-24.25. Radar 24.05-24.45

Ham Band 47.0-47.2 GHz-- High Altitude Platform Systems 49.2-50.2 GHz. Radar and Vehicle Anticollision and vehicle recovery systems 45-46.9 GHz. Wireless Com 46.9-47 and 47.2 &endash; 48.2 GHz

Ham Band 75.5-81.0 GHz-- vehicle anticollision 76-77 GHz

Ham band 116-126 GHz-- ISM 116.5-117 and 122-123 GHz Millimeter wave systems 116-116.5 and 122-122.5 and 126-126.5 GHz.



A bunch of hams "hamming it up" at a picnic a few years ago.

San Bernardino Microwave Society is a technical amateur radio club affiliated with the ARRL having a membership of over 90 amateurs from Hawaii and Alaska to the east coast. Dues are \$15 per year which includes a badge and monthly newsletter. Your mail label indicates your call followed by when your dues are due. Dues can be sent to the treasurer as listed under the banner on the front page. If you have material you would like in the newsletter please send it to Bill WA6QYR at 247 Rebel Road Ridgecrest, CA 93555, [bburns@ridgecrest.ca.us](mailto:bburns@ridgecrest.ca.us), or phone 760-375-8566. The newsletter is generated about the 15th of the month and put into the mail at least the week prior to the meeting. This is your newsletter. SBMS Newsletter material can be copied as long as SBMS is identified as source.

San Bernardino Microwave Society newsletter

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USA

Sorry this has been a light month. 73's Bill